

## CASE 1997-5

Submitted by:

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### **Clinical Summary:**

A 38 year old homosexual male with AIDS, who, in May 1996, presented with language problems and confusion for 1 month. At presentation he was afebrile and without systemic complaints. On examination the patient was alert, but yawning frequently. He was unable to follow complex directives. He was unable to name, repeat or write. He appeared to neglect the right visual field. Pupils were 4 mm and reactive. Ocular motility was full, but the right gaze was somewhat sluggish. Rest of cranial nerve examination was unremarkable. There was no significant weakness. The tone appeared to be increased in the lower extremities. Ankle jerks were absent and toes were down-going. Sensory examination was limited. His CD4 cell count was 180.

MRI of the head revealed multiple lesions involving bilateral subcortical white matter, some of which were enhancing. The most prominent lesion, however, was a wedge-shaped area of abnormal signal in the left parietal lobe, without enhancement or significant mass effect. Lumbar puncture revealed clear CSF, WBC 1, Protein 33, glucose 54. AFB smear and cryptococcal antigen were negative. CSF cultures were sterile.

Repeat MRI 4 weeks later revealed progression of the large white matter lesion with new enhancement and significant mass effect. At that time, the patient had gait and balance disturbances with progression of his language problems. The patient was admitted for brain biopsy, however, he was found unresponsive with dilated pupils next morning. Resuscitation attempts failed and he was pronounced dead.

### **Autopsy Findings:**

The patient was cachectic and had a few truncal molluscum contagiosum. Further postmortem examination was limited to the brain. The brain was swollen and weighed 1400 grams. There was a left uncal herniation with necrosis. Coronal sections revealed general expansion of the left cerebral hemisphere with compression of the left lateral ventricle and midline shift. There were multiple, bilateral subcortical gray-brown lesions, with focal confluence. A cavitary lesion in the left frontal lobe was also seen. Cross sections of the brain stem reveal multiple midbrain and pontine hemorrhages.

**Materials:** One H&E stained section of the left cerebral hemisphere.  
One unstained slide.

**Points for discussion:** 1) What is the diagnosis?  
2) Is the patient immunocompromised?